



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,726	12/03/2001	Leonardo W. Estevez	TI-31035	7169

23494 7590 03/04/2005

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

DINH, TAN X

ART UNIT PAPER NUMBER

2653

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,726

Applicant(s)

ESTEVEZ, LEONARDO W.

Examiner

TAN X. DINH

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Art Unit: 2653

1) The preliminary amendment filed 12/03/2001 is acknowledged.

2) The disclosure is objected to because of the following informalities: Claim 1, line 11-12, claim 13, lines 13-14, the phrase "connected to said" has been doubly repeated, delete one of them is required in next communication.

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4) Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHANG et al (6,631,098) and BUCHHEIM (6,061,306).

CHANG et al discloses a self-contained portable music player as claimed in claim 1, comprising an input/output device including at least a keypad for receiving user inputs and a display (Fig.2, Keys 28 for input and display 24,26), a memory capable of storing digital music in at least one compressed digital format (Fig.2, internal music storage 16), a data processor connected to said

Art Unit: 2653

input/output device and said memory to decompress said digital music into uncompressed digital music samples (Fig.2, Controller 18), an audio coder-decoder connected to data processor for receiving uncompressed digital music samples from data processor and converting said uncompressed digital music samples into analog music (Fig.2, MP-3 decoder 20), a headset connector connected to audio coder-decoder for supplying analog music to an external headset earphone (Fig.2, headset 32), a base connector including a power connection connected to battery pack capable of receiving power from an external base unit (Fig.2, Base 40. See also figure 3, base 40), an analog output connection connected to audio coder-decoder for supplying analog music to an external base unit for amplification and reproduction via speakers (Fig.2, analog output 22), the self-contained portable music player operates in a portable mode disconnected from a base unit and powered by battery pack and a user may listen to selected digital music stored in memory via an external headset earphone (Abstract, in this case, at self-contained portable mode the mp-3 operates by itself independently from docking station 40), and in a base mode connected to a base unit via said base connector and powered via said power connector a user may listen to selected digital music stored in memory via speakers of an external base unit (Abstract, in this case, when connected to base 40 as unit 50, see figure 3, the mp-3 is operated as regular mp-3 player and the user may listen to selected digital music stored in memory via

Art Unit: 2653

speakers 42, see figure 3), except to specifically show the battery is rechargeable battery. BUCHHEIM from the same field teaches a self-contained portable music player can operated in self-contained mode or in combination with a cassette player using a rechargeable batter pack (Fig.2, rechargeable 54, column 8, lines 1-6). Since the method as taught by BUCHHEIM is old and widely used in self-portable digital audio player, one of ordinary skill in the art at the time of the invention was made would have been motivated to replace the battery in CHANG et al's self-contained portable music player by rechargeable battery as claimed.

As to claim 2,14 and 26, it would have been obvious to use volume control in self-portable digital audio player and base unit as claimed since to arrange the locations of volume control in any audio player has been recognized to be within the level of skill in the art.

As to claim 3, CHANG et al shows the base connector include a set of digital connections connected to data processor and audio code-decoder for bi-directional transmission of digital data (column 2, lines 1-26).

As to claims 4 and 16, it would have been obvious to use an infrared transmission interface in CHANG et al's self-contained portable music player for bi-directional transmission of digital data since infrared transmission interface is old and widely used in the audio player art.

Art Unit: 2653

As to claims 5 and 17, BUCHHEIM shows a microphone (Fig.1, microphone 28), a pre-amplifier (Fig.1, pre-amplifier is embedded in audio chip 18) and the audio coder-decoder digitizes sound received by microphone and stores in memory (Fig.1, coder-decoder are embedded in recording chip 26 digitizes the sound from microphone 28 and stores in memory 16).

As to claims 6,7,18 and 19, BUCHHEIM shows data processor is further programmed to compress digitized sounds into a compressed digital format and store compressed digital format in memory (the audio stored in memory 16 is in compressed modes, see column 6, lines 21-33).

As to claims 8-10, CHANG et al shows the base connector further includes an analog input connection connected to audio coder-decoder for receiving an analog input from an external base unit and audio coder-decoder digitizes analog input received via analog input connection and stores digitized analog input in memory (Fig.2, interface port 44 provides analog input and coder-decoder 20 digitizes analog input and stores in internal memory 16 as compressed files).

As to claim 11, CHANG et al shows the memory is non-volatile memory (Fig.2, 16 and column 2, lines 45-60).

As to claim 12, CHANG et al shows data processor is digital signal processor (Fig.2, player 18 is digital signal processor since it processes and converts audio signal to digital audio signal).

Art Unit: 2653

As to claims 13 and 25, it would have been obvious to use pre-amplifier and power amplifier on the base unit for outputting audio signal to speakers, the rationale is as follows: pre-amplifier and power amplifier are old and widely used in the audio art for enhancing and powering the audio output to either speakers or headphone. As seen in CHENG et al's figures 2 and 3, the audio signal generator 22 includes pre-amplifier and power amplifier for outputting the audio signal to either speakers or headphone 32 (self-portable digital audio player) or speakers or headphone 42 (in the base unit 40). Therefore, one of ordinary skill in the art at the time of the invention was made would have been motivated to use pre-amplifier and power amplifier in either self-portable digital audio player or base unit for outputting audio signal.

As to claims 15 and 27, CHANG et al shows digital connectors and a disk drive on the base unit on figure 2, the connection between mass music storage 48 to controller 18 and MP-3 encoder-decoder 20, see also column 3, lines 1-25.

As to claims 20 and 28, it would have been obvious to someone within the level of skill in the art at the time of the invention was made to use a tuner in the base for receiving, digitizing and storing broadcast signal since BUCHHEIM suggests in figure 1, radio receiver 60 for receiving broadcast signal, digitizing and storing broadcast signal into memory 16 and 40(see column 8, lines 15-21).

Art Unit: 2653

As to claims 21 and 22, BUCHHEIM shows the audio signal stored in memory is in compressed digital format (the audio signal is MP-3 compressed format).

As to claim 23, BUCHHEIM shows memory is non-volatile memory (Fig.1, 16 and 40, see also column 5, lines 53-56).

As to claim 24, BUCHHEIM shows data processor is digital signal processing (Fig.1, DSP 36).

5) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See form PTO-892 attached herein).

Applicant is reminded that in amending in response to a rejection of claims (if the rejection involves with any applicable arts), the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR §1.111(c).

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN X. DINH whose telephone number is (703) 308-4859. The examiner can normally be reached on Monday - Friday, 8:00AM - 5:30PM.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2653

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



TAN DINH
PRIMARY EXAMINER

February 28, 2005